Device for moving a control bar of a pressurized water nuclear reactor and method for mounting said device on a vessel cover

ABSTRACT

The adapter (12) and the mechanism housing (13) are made in a single piece, in the form of an integrated housing that is attached by means of the adapter tube (12) in a penetration opening (9a, 9b) of the vessel head (10). The tubular sheath (14) comprises a threaded part (14a) that is screwed into a tapped part (13c) at the end of the integrated housing (15), in a perfectly coaxial disposition. A sealing weld (18) is made between two respective sealing lips of the integrated housing (15) and of the tubular sheath (14). The weld joint (18) is made by melting a filler metal between two joining end parts of the sealing lips by an automatic orbital welding method. The step for mounting and welding the tubular sheath (14) onto the integrated housing (15) may be carried out on the nuclear reactor site with a faultless production of the welded joint (18).

Figure 2.